

REMARKS

Claims 1, 4-11, 13-15, and 17-39 are currently pending. Claim 1 has not been amended to more particularly define the cyclooxygenase-2 selective inhibitor. The amendment of Claim 1 is supported by the specification and does not contain new matter. Support for amendments to Claim 1 can be found throughout the present application, particularly on pages 2, line 7 through page 5, line 18; page 13, line 28 to page 14, line 5. and page 29, lines 4-13. Claims 4-11 have been amended to correct claim dependency.

I. Information Disclosure Statement

The IDS submitted has been fully considered by the Office because certain foreign patents listed thereon did not include an abstract translated in the English language. In response, Applicants will submit an abstract translated in English for all such foreign patents.

In addition, the Office has also not considered the non-patent literature cited on the IDS because copies of the references were not included with the IDS submission. In response, Applicant will submit copies of all non-patent literature identified in the IDS to the Office for its consideration.

II. 35 U.S.C. 112 Rejection

Claim 2 has been rejected by the Office under 35 U.S.C. 112, second paragraph, as being indefinite. Because claim 2 has been deleted, Applicants respectfully request that this rejection be withdrawn.

III. 35 U.S.C. 103 Rejections

A. Claims 1, 14-15 and 19-21 are not obvious in view of the disclosure of Masferrer et al.

Reconsideration is requested of the rejection of claims 1, 14-15, and 19-21 under 35 U.S.C. 103 (a) in view of Masferrer et al..

Claims 2, 12, and 16 have been cancelled, so their rejection under 35 U.S.C. 103(a) in view of Masferrer et al. is moot.

Claim 1 is directed toward a method to treat an ocular mediated COX-2 disorder in a subject. The method requires administering **a COX-2 inhibitor selected from** the group consisting of celecoxib, deracoxib, valdecoxib, parecoxib, a benzopyran COX-2 inhibitor, rofecoxib, etoricoxib, 2-(3,5-difluorophenyl)-3-[4-(methylsulfonyl)phenyl]-2-cyclopenten-1-one and 2-(3,4-difluorophenyl)-4-(3-hydroxy-3-methylbutoxy)-5-[4-(methylsulfonyl)-phenyl]-3(2H)-pyridazinone, JTE-522, DuP 697, ABT-963, and L-776,967.

Masferrer et al. generally discloses the discovery of the COX-2 isoform and its role in the inflammation process. The reference also discloses that COX-2 inhibitors may be beneficial in the treatment of certain ocular inflammatory diseases. Nowhere, however, do Masferrer et al. disclose or suggest any specific COX-2 inhibitors that may be employed to treat ocular inflammatory diseases. Moreover, nowhere do Masferrer et al. disclose or suggest the use of the specific COX-2 inhibitors recited in claim 1.

The Office has not established a *prima facie* case that claim 1 is obvious in view of Masferrer et al. because Masferrer et al. does not disclose or suggest the specific COX-2 inhibitors required in claim 1.

According to the Office, however, a skilled artisan would be "motivated to develop or use non-steroidal selective COX-2 inhibitors to treat ocular inflammatory conditions." As acknowledged by the Office in paper 10, at page 2, Masferrer et al., do not specifically disclose COX-2 inhibitors that may be employed in the treatment of COX-2-mediated ocular disorders. Claim 1 requires the use of a COX-2 inhibitor selected from the group consisting of celecoxib, deracoxib, valdecoxib, parecoxib, a benzopyran COX-2 inhibitor, rofecoxib, etoricoxib, 2-(3,5-difluorophenyl)-3-[4-(methylsulfonyl)-phenyl]-2-cyclopenten-1-one and 2-(3,4-difluorophenyl)-4-(3-hydroxy-3-methylbutoxy)-5-[4-(methylsulfonyl)-phenyl]-3(2H)-pyridazinone, JTE-522, DuP 697, ABT-963, and L-776,967. Nowhere, however, does the disclosure of Masferrer et al. empower a skilled artisan to select particular COX-2 selective inhibitors from the universe of all possible COX-2 inhibitors. And, more particularly, nowhere do Masferrer et al. empower a skilled artisan to select the COX-2 selective inhibitors required in claim 1.

Because the sole reference relied upon by the Office does not disclose or suggest the recited method in claim 1, the Office appears to be applying “hindsight reconstruction” by using the teaching of the Applicants’ patent application as a guide for searching and analyzing the reference in the right way to arrive at the claims at issue. Such hindsight reconstruction is clearly contrary to the law. The *prima facie* burden of establishing claim 1 would have been obvious to a skilled artisan in view of Masferrer et al. has not been met. The Office does not set forth sufficient art based rational as to why a person of skill in the art either would have been motivated by Masferrer et al. to employ the COX-2 inhibitors recited in claim 1 for the treatment of COX-2 mediated ocular inflammatory disorders or would have had a reasonable expectation that the method would be successful if these particular inhibitors were employed.

In view of the foregoing, Applicants’ respectfully request that the rejection of claim 1 be withdrawn. Claims 14-15, and 19-21 depend from claim 1 and are therefore patentable over Masferrer et al. for the reasons stated with respect to claim 1 and by reason of the additional requirements that they introduce.

B. Claims 1-39 are not obvious in view of the disclosure of Miyake et al.

Reconsideration is requested of the rejection of claims 1-39 under 35 U.S.C. 103 (a) in view of Miyake et al..

Claims 2-3, 12, and 16 have been cancelled, so their rejection under 35 U.S.C. 103(a) in view of Miyake et al. is moot.

Claim 1 is directed toward a method to treat an ocular mediated COX-2 disorder in a subject. The method requires administering **a COX-2 inhibitor selected from** the group consisting of celecoxib, deracoxib, valdecoxib, parecoxib, a benzopyran COX-2 inhibitor, rofecoxib, etoricoxib, 2-(3,5-difluorophenyl)-3-[4-(methylsulfonyl)phenyl]-2-cyclopenten-1-one and 2-(3,4-difluorophenyl)-4-(3-hydroxy-3-methylbutoxy)-5-[4-(methylsulfonyl)-phenyl]-3(2H)-pyridazinone, JTE-522, DuP 697, ABT-963, and L-776,967.

Miyake et al. generally discloses an eye drop formulation that may be used as anti-inflammatory agents. In particular, the reference discloses that the eye drop formulation contains “chemicals selectively inhibiting COX-2 selected

from among **etodolac, N-(2-(cyclohexyloxy)-4-nitrophenyl)-methanesulfonamide and meloxicam**,” Nowhere, however, do Miyake et al. disclose or suggest any of the specific COX-2 inhibitors recited in claim 1. Applicants comments regarding the disclosure of Miyake et al. are based upon the published PCT English abstract. Applicants have not had the entire disclosure of Miyake translated into the English language. If the Office has had such a translation performed, please provide the Applicants with a copy.

The Office has not established a *prima facie* case that claim 1 is obvious in view of Miyake et al. because Miyake et al. does not disclose or suggest the specific COX-2 inhibitors required in claim 1.

The Office asserts that “the skilled artisan would have been motivated to use the selective COX-2 inhibitors of Miyake et al. to treat ocular inflammation without regard to its cause.”¹

Nowhere do Miyake et al. empower a skilled artisan to select the COX-2 selective inhibitors required by claim 1.

If anything, the disclosure of Miyake et al. teaches away from the invention defined by claim 1. Miyake et al. disclose eye drops that contain any of three “selective” COX-2 inhibitors. More particularly, Miyake et al. disclose that the eye drops should contain “**etodolac, N-(2-(cyclohexyloxy)-4-nitrophenyl)-methanesulfonamide and meloxicam**”. Claim 1 on the other hand, is directed toward the use of COX-2 selective inhibitors selected from the group consisting of celecoxib, deracoxib, valdecoxib, parecoxib, a benzopyran COX-2 inhibitor, rofecoxib, etoricoxib, 2-(3,5-difluorophenyl)-3-[4-(methylsulfonyl)phenyl]-2-cyclopenten-1-one and 2-(3,4-difluorophenyl)-4-(3-hydroxy-3-methylbutoxy)-5-[4-(methylsulfonyl)-phenyl]-3(2H)-pyridazinone, JTE-522, DuP 697, ABT-963, and L-776,967. Not one of the COX-2 inhibitors recited in claim 1 is disclosed or suggested by Miyake. A skilled artisan empowered with the disclosure of Miyake et al., therefore, would not be motivated to select any of the COX-2 inhibitors required in claim 1 based solely upon this reference.

Additionally, the Office asserts that Miyake et al. renders claim 1 obvious because “it teaches using selective COX-2 inhibitors to treat ocular

¹ See Paper 10 at page 6

inflammation.”² Claim 1 however, is not limited solely by the treatment of ocular inflammation. Instead claim 1 is directed toward a method to treat ocular COX-2 mediated disorders. While ocular COX-2 mediated disorders may include inflammation as a component, claim 1 is not limited solely to the treatment of inflammation.

Again, the Office appears to be applying “hindsight reconstruction” by using the teaching of the Applicants’ patent application as a guide for searching and analyzing the reference in the right way to arrive at the method of claim 1. And, as such, the Office has failed to establish that claim 1 is *prima facie* obvious in view of Miyake et al.

In view of the foregoing, Applicants respectfully request that the rejection of claim 1 be withdrawn. Claims 4-11, and 13-15 depend from claim 1 and are therefore patentable over Miyake et al. for the reasons stated with respect to claim 1 and by reason of the additional requirements that they introduce.

Claim 19 is directed toward treatment of COX-2 mediated ocular disorders selected from the group consisting of macular edema, intraoperative miosis and ocular pain. The method comprises administering deracoxib to a mammal. Nowhere does Miyake et al. disclose or suggest use of deracoxib to treat these particular ocular disorders. Because Miyake fails to disclose all of the elements recited in claim 19, it does not render claim 19 obvious. Claim 20-21 depends from claim 19 and is therefore patentable over Miyake et al. for the reasons stated with respect to claim 19 and by reason of the additional requirements that they introduce.

Claim 22 is directed toward treatment of COX-2 mediated ocular disorders selected from the group consisting of macular edema, intraoperative miosis and ocular pain. The method comprises administering valdecoxib to a mammal. Nowhere does Miyake et al. disclose or suggest use of valdecoxib to treat these particular ocular disorders. Because Miyake fails to disclose all of the elements recited in claim 22, it does not render claim 22 obvious. Claim 23 depends from claim 22 and is therefore patentable over Miyake et al. for the reasons stated

² See Paper 10 at page 6

with respect to claim 22 and by reason of the additional requirements that they introduce.

Claim 24 is directed toward treatment of COX-2 mediated ocular disorders selected from the group consisting of macular edema, intraoperative miosis and ocular pain. The method comprises administering a benzopyran COX-2 inhibitor to a mammal. Nowhere does Miyake et al. disclose or suggest use of a benzopyran COX-2 inhibitor to treat these particular ocular disorders. Because Miyake fails to disclose all of the elements recited in claim 24, it does not render claim 24 obvious. Claim 25 depends from claim 24 and is therefore patentable over Miyake et al. for the reasons stated with respect to claim 24 and by reason of the additional requirements that they introduce.

Claim 26 is directed toward treatment of COX-2 mediated ocular disorders selected from the group consisting of macular edema, intraoperative miosis and ocular pain. The method comprises administering parecoxib to a mammal. Nowhere does Miyake et al. disclose or suggest use of parecoxib to treat these particular ocular disorders. Because Miyake fails to disclose all of the elements recited in claim 26, it does not render claim 26 obvious. Claim 27 depends from claim 26 and is therefore patentable over Miyake et al. for the reasons stated with respect to claim 26 and by reason of the additional requirements that they introduce.

Claim 28 is directed toward treatment of COX-2 mediated ocular disorders selected from the group consisting of macular edema, intraoperative miosis and ocular pain. The method comprises administering rofecoxib to a mammal. Nowhere does Miyake et al. disclose or suggest use of rofecoxib to treat these particular ocular disorders. Because Miyake fails to disclose all of the elements recited in claim 28, it does not render claim 28 obvious. Claim 29-30 depends from claim 28 and is therefore patentable over Miyake et al. for the reasons stated with respect to claim 28 and by reason of the additional requirements that they introduce.

Claim 31 is directed toward treatment of COX-2 mediated ocular disorders selected from the group consisting of macular edema, intraoperative miosis and ocular pain. The method comprises administering etoricoxib to a mammal. Nowhere does Miyake et al. disclose or suggest use of etoricoxib to treat these

particular ocular disorders. Because Miyake fails to disclose all of the elements recited in claim 31, it does not render claim 31 obvious. Claim 32-33 depends from claim 31 and is therefore patentable over Miyake et al. for the reasons stated with respect to claim 31 and by reason of the additional requirements that they introduce.

Claim 34 is directed toward treatment of COX-2 mediated ocular disorders selected from the group consisting of macular edema, intraoperative miosis and ocular pain. The method comprises administering 2-(3,5-difluorophenyl)-3-[4-(methylsulfonyl)phenyl]-2-cyclopenten-1-one to a mammal. Nowhere does Miyake et al. disclose or suggest use of 2-(3,5-difluorophenyl)-3-[4-(methylsulfonyl)phenyl]-2-cyclopenten-1-one to treat these particular ocular disorders. Because Miyake fails to disclose all of the elements recited in claim 34, it does not render claim 34 obvious. Claim 35-36 depends from claim 34 and is therefore patentable over Miyake et al. for the reasons stated with respect to claim 34 and by reason of the additional requirements that they introduce. _

Claim 37 is directed toward treatment of COX-2 mediated ocular disorders selected from the group consisting of macular edema, intraoperative miosis and ocular pain. The method comprises administering 2-(3,4-difluorophenyl)-4-(3-hydroxy-3-methylbutoxy)-5-[4-(methylsulfonyl)phenyl]-3(2H)-pyridazinone to a mammal. Nowhere does Miyake et al. disclose or suggest use of 2-(3,4-difluorophenyl)-4-(3-hydroxy-3-methylbutoxy)-5-[4-(methylsulfonyl)phenyl]-3(2H)-pyridazinone to treat these particular ocular disorders. Because Miyake fails to disclose all of the elements recited in claim 37, it does not render claim 37 obvious. Claim 38-39 depends from claim 37 and is therefore patentable over Miyake et al. for the reasons stated with respect to claim 37 and by reason of the additional requirements that they introduce.

IV. Obviousness-type Double Patenting Rejection

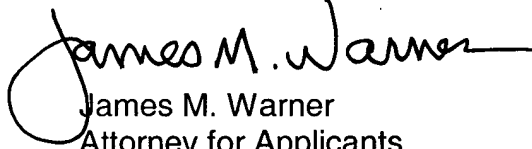
Claims 1-39 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 40 of copending Application No. 09/904,098. As acknowledged by the Office, the alleged conflicting claims have not been allowed. Applicants, therefore, will

address the merits of the obviousness-type double patenting rejection when or if copending Application No. 09/904,098 is allowed.

V. Conclusion

In light of the foregoing Applicants request entry of the claimed amendments, withdrawal of the claim rejections and solicit and allowance of the claims. The Examiner is invited to contact the undersigned Attorney should any issues remain unresolved,

Respectfully submitted,

A handwritten signature in black ink that reads "James M. Warner". The signature is fluid and cursive, with a large initial "J" and a long horizontal stroke at the end.

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